

**IMPROVED AUTOMOTIVE HYDRAULIC BRAKING SYSTEM AND A
HYDRAULIC BRAKE INTENSIFYING APPARATUS FOR USE
THEREIN**

ABSTRACT OF THE DISCLOSURE

5

The subject invention provides an improved hydraulic braking system and a hydraulic pressure intensifying apparatus (10) for use in the braking system. The braking system includes a master cylinder assembly (26, 126), with the intensifying apparatus (10) incorporated into a hydraulic fluid line (34, 134) extending to brakes (11, 13) of a vehicle (16). The intensifying apparatus includes a cylindrical chamber (42) having an inlet end (44) and an outlet end (46). The chamber (42) is sealed by a first end wall (116) at the inlet end (44). A piston assembly (52) is slidably supported in the chamber (42). The piston assembly (52) includes a first piston (54) having a first outer annular wall (100). A biasing means (60) extending axially through the chamber (42) biases the first piston (54) against the first end wall (116). One of the first piston (54) and the first end wall (116) defines an aperture (110) for allowing fluid to flow into the piston assembly (52) from the inlet end (44) of the chamber (42).

10

15